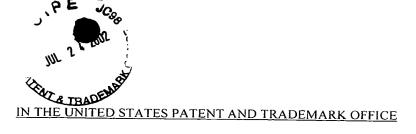
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Blirlos #11

IN RE APPLICATION OF:

Isabelle AFRIAT

EXAMINER: BERMAN

SERIAL NO.: 09/884,949

FILED: JUNE 21, 2001

GROUP ART UNIT: 1619

FOR:

COMPOSITION IN THE FORM OF A WATER-IN-OIL EMULSION WITH A VARIABLE SHEAR RATE AND METHODS OF USING THE SAME

RECEIVED

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DECLARATION UNDER 37 C.F.R. 1.132

ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, D.C. 20231

SIR:

, Veronique Chevalir hereby declare:

- 1. I am employed by L=ORÉAL as an engineer and have experience in the field of emulsions, particularly water-in-oil (W/O) emulsions, and their use in cosmetic and/or dermatological compositions.
- 2. I understand the English language.
- 3. I am familiar with the disclosure in U.S. patent 5, 851, 539 ("Mellul").
- 4. The following observations and experiments were carried out by me or under my direct supervision and control.
- 5. The six W/O emulsions identified below were prepared. Example 1 refers to example 1 of the above-identified application. CM 3/1 and CM 3/2 also represent emulsions of the present invention. Comparative emulsion CM 3/5 corresponds to Mellul's example 24 and contains only 70% aqueous phase. Emulsions CM 3/3 and CM 3/4 correspond to Mellul's example 24 and contain hydrofluorocarbon.

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Composition	•Example & T	BARM 3/1	CM 3/2	CM 3/5	CM 3/3	CM 3/4
KF-6015	1.75%	1.81%	1.21%	2.69%	1.81%	1.21%
Pentacyclo-	17.75%	18.36%	12.24%	27.31% <		
methicone				,		
Fluorohydro-					18.36%	12.24%
carbon						
NaCl	2.5%	2.59%	1.72%	2.17%-	2.59%	1.72%
Glycerin	7%	7.24%	4.83%	6.09%	7.24%	4.83%
Water	71%	70%	80%	61.74%	70%	70%
Macroscopic	White	White	White	White	Precipitation	Precipitation
Aspect	Cream	Cream	Cream	Cream	when	when
					aqueous	aqueous
					phase added	phase added

- 5. Each of the W/O emulsions corresponding to the present invention, Example 1, CM 3/1, and CM 3/2, as well as comparative example CM 3/5 were subjected to several different shear stresses to examine the rheological properties of the emulsions under these conditions. Typically, when compositions are applied to skin, the user applies a shear stress of about 100 Pa to about 1000 Pa. Thus, the applied shear stress represents forces to which W/O emulsions are subject when applying the emulsions to skin. Attached to this declaration are four graphs depicting the results observed when each of these W/O emulsions was subjected to the different shear stresses. Measurements were made using a Rhemometer RS 150 Haake at 25 (degrees) C.
- 6. The results in these graphs indicate that the three W/O emulsions containing 80% or more electrolyte-containing aqueous phase readily Abreak≅ (that is, suddenly become fluid) under shear stresses applied to the emulsions. Thus, these results indicate that W/O emulsions containing 80% or more aqueous phase readily Abreak≅ when applied to skin. When a W/O emulsion Abreaks,≅ more of the aqueous phase becomes available for contact with the skin to which the emulsion is applied, making the W/O emulsion feel less heavy and oily to the skin. Having more aqueous phase available for contact with the skin gives the W/O emulsion a fresher feeling upon application to the skin.

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- 7. In contrast, the results in these graphs indicate that W/O emulsions having 70% or less of the same aqueous phase (that is, emulsion CM 3/5) do not readily Abreak.≅ Thus, W/O emulsions having 70% or less aqueous phase do not have as much aqueous phase available for contact with the skin and, thus, do not have the same feeling of freshness upon application which W/O emulsions having 80% or more aqueous phase have.
- 8. This difference in Abreak≅ properties and, thus, ability to afford freshness upon application to skin between W/O emulsions containing 80% or more aqueous phase and those containing 70% or less aqueous phase is significant in the cosmetic field where freshness upon application to skin is desirable in products.

 Moreover, this difference between such emulsions was unexpected and surprising.
- 9. To further demonstrate Abreak,≅ attached to this declaration are two photographs of corresponding to emulsion CM 3/2 depicting this property. The first photograph was taken after 20 seconds at a shear stress of 350 Pa. The water globules on this photograph are very fine and the emulsion is homogeneous. The second photograph was taken after 300 seconds at a shear stress of 350 Pa. In contrast to the first photograph, the water globules on this photograph are larger and the emulsion is less homogeneous. By the time the second photograph was taken, the depicted emulsion had Abroken,≅ making more aqueous phase available for contact with the skin.
- 10. Emulsions CM 3/3 and CM 3/4 contain fluorohydrocarbon (like Mellul's example 24). The difference between these emulsions and emulsions of the present invention was noticeable during their preparation: there was a precipitation when the aqueous phase of CM 3/3 and CM 3/4 was combined with the oil phase, whereas no such precipitation occurred during preparation of the emulsions of the present invention. Attached hereto are two photographs demonstrating the different products obtained from these two different types of emulsion. The emulsion containing fluorohydrocarbon was a crude paste, unacceptable for cosmetic purposes, whereas the emulsion of the present invention was a cream product suitable for use in the cosmetic industry. This difference between such emulsions, as well as the difference experienced during preparation of these emulsions, was unexpected and surprising.
- 11. The undersigned petitioner declares further that all statements made herein of her own knowledge are true and that all statements made on information and belief are believe to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of this application or any patent issuing thereon.

12. Further deponent sayeth not.

Name
Signature
Date

Le Character

Le Character

Date

Date

Le Character

Date

Date

Date

Date